BRUHATH BANGALORE MAHANAGARA PALIKE
EXECUTIVE ENGINEER, YELAHANKA DIVISION

Name of Work: Construction of RCC Drain at Ayyappa Swamy Layout in Ward No.01 of Yelahanka Sub Division.

DETAILED ESTIMATE

Estimated Cost= 10000000.00

Sl No	Description of work	Unit	Nos	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
1	KSRRB 300-1. Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (KPWD SR 2018-19, Page No.143, Item No.19.1)								
		Cum							
	Rate Analysis								
	Basic Rate	130.00							
	Area Weightage @6%	7.80							
	Lead for 5Km (2x1.28x5)+57	69.80							
	Total Amount	**207.60**							
	New RCC Drain								
	Cross Road-1 from Airport Road to Daed End								
	0-185	Rhs	1	185.00	1.20	1.10	244.20		
	Cross Road-2 from cross Road-1								
	0-40	Rhs	1	40.00	1.20	1.10	52.80		
	Cross Road-3 from Cross Road-1 to Cross Road-4								
	0-30	Rhs	1	30.00	1.20	1.10	39.60		
	Cross Road -4								
	0-71	Rhs	1	71.00	1.20	1.10	93.72		
	Cross Road-5 from Airport Road								
	0-532	Rhs	1	532.00	1.20	1.10	702.24		
	New RCC Culvert								
			3	6.00	1.30	1.10	25.74		
							Total Quantity	**1158.30**	**207.60**	**240463.08**
2	KSRB 4-1.2 : Providing and laying in position plain cement concrete of Mix 1:3:6 with OPC @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2 (KPWD SR 2018-19, Page No.13, Item No.4.2)								
		Cum							
	Rate Analysis								
	Basic Rate	5194.00							
	Area Weightage @6%	311.64							
	Total Amount	**5505.64**							
	New RCC Drain								
	Cross Road-1 from Airport Road to Daed End								
	0-185	Rhs	1	185.00	1.20	0.15	33.30		
	Cross Road-2 from cross Road-1								
	0-40	Rhs	1	40.00	1.20	0.15	7.20		
	Cross Road-3 from Cross Road-1 to Cross Road-4								
	0-30	Rhs	1	30.00	1.20	0.15	5.40		

No	Description of work	Unit	Nos	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
	Cross Road -4								
	0-71	Rhs	1	71.00	1.20	0.15	12.78		
	Cross Road-5 from Airport Road								
	0-532	Rhs	1	532.00	1.20	0.15	95.76		
	New RCC Culvert								
			3	6.00	1.30	0.15	3.51		
						Total Quantity	157.95	5505.64	869615.84
3	KSRB 4.2.2 : Providing and laying in position reinforced cement concrete of Design Mix M20 with OPC @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregtes @ 0.460 cum, with super plasticisers @ 3 liters confirming to IS 9103-1999 reafirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM curing, complete but excluding cost of reinforcement as per specifications.Specification No. KBS 4.1, 4.6(KPWD SR 2018-19, Page No.14, Item No.4.11)								
		Cum							
	Rate Analysis								
	Basic Rate	5659.00							
	Area Weightage @6%	339.54							
	Total Amount	5998.54							
	New RCC Drain								
	Raft								
	Cross Road-1 from Airport Road to Daed End								
	0-185	Rhs	1	185.00	0.90	0.15	24.98		
	Cross Road-2 from cross Road-1								
	0-40	Rhs	1	40.00	0.90	0.15	5.40		
	Cross Road-3 from Cross Road-1 to Cross Road-4								
	0-30	Rhs	1	30.00	0.90	0.15	4.05		
	Cross Road -4								
	0-71	Rhs	1	71.00	0.90	0.15	9.59		
	Cross Road-5 from Airport Road								
	0-532	Rhs	1	532.00	0.90	0.15	71.82		
	New RCC Culvert								
			3	6.00	1.10	0.15	2.97		
	Wall								
	Cross Road-1 from Airport Road to Daed End								
	0-185	Rhs	2	185.00	0.15	0.60	33.30		
	Cross Road-2 from cross Road-1								
	0-40	Rhs	2	40.00	0.15	0.60	7.20		
	Cross Road-3 from Cross Road-1 to Cross Road-4								
	0-30	Rhs	2	30.00	0.15	0.60	5.40		
	Cross Road -4								
	0-71	Rhs	2	71.00	0.15	0.60	12.78		
	Cross Road-5 from Airport Road								

Sl No	Description of work	Unit	Nos	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
	0-532	Rhs	2	532.00	0.15	0.60	95.76		
	New RCC Culvert								
			6	6.00	0.25	0.60	5.40		
						Total Quantity	**278.64**	**5998.54**	**1671433.19**
4	KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth cills and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 (KPWD SR 2018-19, Page No.16, Item No.4.31)								
		Sqm							
	Rate Analysis								
	Basic Rate	358.00							
	Area Weightage @6%	21.48							
	Total Amount	**379.48**							
	Wall								
	Cross Road-1 from Airport Road to Daed End								
	0-185	Rhs	4	185.00		0.60	444.00		
	Cross Road-2 from cross Road-1								
	0-40	Rhs	4	40.00		0.60	96.00		
	Cross Road-3 from Cross Road-1 to Cross Road-4								
	0-30	Rhs	4	30.00		0.60	72.00		
	Cross Road -4								
	0-71	Rhs	4	71.00		0.60	170.40		
	Cross Road-5 from Airport Road								
	0-532	Rhs	4	532.00		0.60	1276.80		
	New RCC Culvert								
			12	6.00		0.60	43.20		
						Total Quantity	**2102.40**	**379.48**	**797818.75**
5	KSRB 4.9.2 : Providing T.M.T steel reinforcement for R.C.C work TMT bars Fe500 including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specifications. Specification No. KBS 4.6.3 (KPWD SR 2018-19, Page No.18, Item No.4.46.2)								
		Tonne							
	Rate Analysis								
	Basic Rate	70966.00							
	Area Weightage @6%	4257.96							
	Total Amount	**75223.96**							
	Considering 60Kgs for Drain per Cum		1	270.27		0.060	16.22		
	Considering 75Kgs for Culvert per Cum		1	8.37		0.075	0.63		
						Total Quantity	**16.84**	**75223.96**	**1267068.62**
6	Providing **precast slab of 100 mm thick** including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge Data Rate								
		Sqm							
	Data Rate								

Sl No	Description of work	Unit	Nos	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
	For Covering Slab								
	Cross Road-1 from Airport Road to Daed End								
	0-185	Rhs	1	185.00	0.90		166.50		
	Cross Road-2 from cross Road-1								
	0-40	Rhs	1	40.00	0.90		36.00		
	Cross Road-3 from Cross Road-1 to Cross Road-4								
	0-30	Rhs	1	30.00	0.90		27.00		
	Cross Road -4								
	0-71	Rhs	1	71.00	0.90		63.90		
	Cross Road-5 from Airport Road								
	0-532	Rhs	1	532.00	0.90		478.80		
						Total Quantity	**772.20**	**2337.00**	**1804631.40**
7	Providing precast slab of 250 mm thick including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge Data Rate								
		Sqm							
	Data Rate								
	Basic Rate	5418.00							
	Area Weightage @6%								
	Total Amount	**5418.00**							
	For Culvert								
			3	6.00	1.2		21.60		
						Total Quantity	**21.60**	**5418.00**	**117028.80**
	Road Work								
8	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications.MORTH Specification No.301(KPWD SR 2018-19, Page No.143, Item No.19.14)								
		Cum							
	Rate Analysis								
	Basic Rate	41.00							
	Area Weightage @6%	2.46							
	Total Amount	**43.46**							
	CC Road								
	Cross Road-1 from Airport Road to Daed End								
	0-185		1	185.00	4.00	0.30	222.00		
	Cross Road-2 from cross Road-1								
	0-40		1	40.00	4.00	0.30	48.00		
	Cross Road-3 from Cross Road-1 to Cross Road-4								
	0-30		1	30.00	4.00	0.30	36.00		
	Cross Road -4								
	0-71		1	71.00	4.00	0.30	85.20		
						Total Quantity	**391.20**	**43.46**	**17001.55**

Sl No	Description of work	Unit	Nos	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
9	KSRRB 300-58. Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications. MORTH / Chapter 3(KPWD SR 2018-19, Page No.147, Item No.19.64)								
		Sqm							
	Rate Analysis								
	Basic Rate	6.00							
	Area Weightage @6%	0.36							
	Total Amount	**6.36**							
	CC Road								
	Cross Road-1 from Airport Road to Daed End								
	0-185		1	185.00	4.00		740.00		
	Cross Road-2 from cross Road-1								
	0-40		1	40.00	4.00		160.00		
	Cross Road -4								
	0-71		1	71.00	4.00		284.00		
						Total Quantity	**1184.00**	**6.36**	**7530.24**
10	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications. Clause 401 of MORTH V Revision.(KPWD SR 2018-19, Page No.153, Item No.20.5)								
		Cum							
	Rate Analysis								
	Basic Rate	1882.00							
	Area Weightage @6%	112.92							
	Total Amount	**1994.92**							
	CC Road								
	Cross Road-1 from Airport Road to Daed End								
	0-185		1	185.00	4.00	0.15	111.00		
	Cross Road-2 from cross Road-1								
	0-40		1	40.00	4.00	0.15	24.00		
	Cross Road -4								
	0-71		1	71.00	4.00	0.15	42.60		
						Total Quantity	**177.60**	**1994.92**	**354297.79**
11	KSRRB M600-1.Providing and Constructing dry lean cement concrete mix CC 1:5:10 base with OPC 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @0.58cum over a prepared sub-base, coarse and fine aggregate conforming to IS: 383-2016,aggregate cement ratio not to exceed 15:1, Aggregate gradation after blending to be as per Table 600-1,optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. Clause 601of MORTH V Revision and IS 456 Table-5 -do- with OPC at 150 kg/cum and coarse aggregate 0.86cum, fine aggregate 0.58cum using Concrete Batch mix Plant at 75 cum/hr capacity with fixed form paver. (KPWD SR 2018-19, Page No.174, Item No.22.1.2)								
		Cum							

Sl No	Description of work	Unit	Nos	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
	Rate Analysis								
	Basic Rate	3665.00							
	Area Weightage @6%	219.90							
	Total Amount	**3884.90**							
	For CC Road								
	Cross Road-1 from Airport Road to Daed End								
	0-185		1	185.00	4.00	0.15	111.00		
	Cross Road-2 from cross Road-1								
	0-40		1	40.00	4.00	0.15	24.00		
	Cross Road-3 from Cross Road-1 to Cross Road-4								
	0-30		1	30.00	4.00	0.15	18.00		
	Cross Road -4								
	0-71		1	71.00	4.00	0.15	42.60		
						Total Quantity	**195.60**	**3884.90**	**759886.44**
12	Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine, and curing including cost of all materials, labour,hire charges of machineries,all lead & lift charges etc., complete as per specifications. -do- with OPC at 360 kg/cum and coarse aggregate 0.69cum, fine aggregate 0.46cum. (KPWD SR 2018-19, Page No.174, Item No.22.6)								
		Cum							
	Rate Analysis								
	Basic Rate	4916.00							
	Area Weightage @6%	294.96							
	Total Amount	**5210.96**							
	For CC Road								
	Cross Road-1 from Airport Road to Daed End								
	0-185		1	185.00	4.00	0.15	111.00		
	Cross Road-2 from cross Road-1								
	0-40		1	40.00	4.00	0.15	24.00		
	Cross Road-3 from Cross Road-1 to Cross Road-4								
	0-30		1	30.00	4.00	0.15	18.00		

No	Description of work	Unit	Nos	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
	Cross Road -4								
	0-71		1	71.00	4.00	0.15	42.60		
						Total Quantity	195.60	5210.96	1019263.78
								Total Construction Amount	8926039.00
								Add GST Charges 12%	1071125.00
								Sub Total	9997164.00
								Miscellaneous and unforeseen charges etc.L.S	2836.00
								Grand Total	10000000.00

Certificate:

1. The work spot has been inspected and found to be necessary
2. The work spot comes under BBMP Limits
3. The provisions made in the estimate are necessary and minimum
4. The estimate is based on CSR of 2018-19 and issuse rate on 01-01-2019

Assistant Engineer
Ward No.01
BBMP

Assistant Executive Engineer
Yelahanka Sub Division
BBMP

Executive Engineer
Yelahanka Division
BBMP

BRUHATH BANGALORE MAHANAGARA PALIKE
EXECUTIVE ENGINEER, YELAHANKA DIVISION

ame of Work: Providing Grill Work for BB Road in Ward No.01 of Yelahanka Sub Division

DETAILED ESTIMATE

								Estimated Cost=	5000000.00	
Sl No	Description of work	Unit	Nos	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
1	KSRRB 300-1. Earthwork excavation by **manual means for roads, drains** & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (KPWD SR 2018-19, Page No.143, Item No.19.1)									
		Cum								
	Rate Analysis									
	Basic Rate	130.00								
	Area Weightage @6%	7.80								
	Lead for 5Km (2x1.28x5)+57	69.80								
	Total Amount	207.60								
	Desilting									
	BB Road at Railway Underpass near Police Station									
		E/s	1	38.00	0.50	0.40	7.60			
		E/s	1	64.00	0.50	0.40	12.80			
		E/s	1	83.00	0.50	0.40	16.60			
		W/s	1	63.00	0.50	0.40	12.60			
		W/s	1	49.00	0.50	0.40	9.80			
		W/s	1	18.50	0.50	0.40	3.70			
	Debris		2	22.00	1.20	0.30	15.84			
							Total Quantity	78.94	207.60	16387.94
2	KSRB 5.2 : Providing and constructing granite / trap / basalt **size stone masonry** in foundation with cement mortar, stone hammered dressed in courses not less than 20 cms high, bond stones at 2m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13 - do - cement mortar 1:6 KBS 5.1.13 (KPWD SR 2018-19, Page No.25, Item No.5.6)									
		Cum								
	Rate Analysis									
	Basic Rate	4596.00								
	Area Weightage @6%	275.76								
	Total Amount	4871.76								
	Flagging at Road Side									
	BB Road at Railway Underpass near Police Station									
		E/s	2	64.00	0.45	0.40	23.04			
		W/s	2	49.00	0.45	0.40	17.64			
							Total Quantity	40.68	4871.76	198183.20
3	KSRB 4-1.6 ; Providing and laying in position plain cement concrete of Mix 1:2:4 with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2 (KPWD SR 2018-19, Page No.13, Item No.4.6)									
		Cum								
	Rate Analysis									
	Basic Rate	5422.00								
	Area Weightage @6%	325.32								
	Total Amount	5747.32								
	Coping Concrete									
	Forc SSM Drain									

Sl No	Description of work	Unit	Nos	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
	BB Road at Railway Underpass near Police Station								
		E/s	2	64.00	0.45	0.100	5.76		
		W/s	2	49.00	0.45	0.100	4.41		
	For Below KERB Stone								
		E/s	1	38.00	0.20	0.100	0.76		
		E/s	1	64.00	0.20	0.100	1.28		
		E/s	1	83.00	0.20	0.100	1.66		
		W/s	1	63.00	0.20	0.100	1.26		
		W/s	1	49.00	0.20	0.100	0.98		
		W/s	1	18.50	0.20	0.100	0.37		
						Total Quantity	16.48	5747.32	94715.83
4	Fabrication, providing and erecting in position Hot dip galvanised Grill using 72 x72 x 4mm Sq. GI Pipe frame with top pipe bending in heavy hydraulic press with sand packing and hot bending to form double arch as per drawing profile, 20mm hot dip galvanised Sq. rod for verticals at 150mm c/c, as shown in the drawing including providing ho dip galvanised forged ornamental design in between sq. rods and heads at top, middle and bottom. Intermediate supports of 72x12mm and 50x6mm arch bent to hot dip galvanised flats the work is inclusive of troughing GI flat GI sq. rods, placing, welding all the joints including grinding, finishing metal patty, painting two coats enamel painting. The rate is inclusive of all materials like GI sq rods, GI gorged designs etc., heavy duty hinges are made out of 75mm solid sq block assembled with 20mm dia bearing in three places for each flop. Heavy duty locking arrangements at two places including cost of labour, unloading, scaffolding charges and all other incidental charges for successful completion of the work as per directions of the engineer-in-charge of the work.								
		Sqm							
	Data Rate	9144							
	BB Road at Railway Underpass near Police Station								
		E/s	1	38.00		1.20	45.60		
		E/s	1	64.00		1.20	76.80		
		E/s	1	83.00		1.20	99.60		
		W/s	1	63.00		1.20	75.60		
		W/s	1	49.00		1.20	58.80		
		W/s	1	18.50		1.20	22.20		
						Total Quantity	378.60	9144.00	3461918.40
5	Providing and fixing pre cast solid cement concrete kerb stones made out of C.C. 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including form work, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc., complete.(KPWD SR 2018-19, Page No.27, Item No.5.30)								
		Nos							
	Rate Analysis								
	Basic Rate	408.00							
	Area Weightage @6%	24.48							
	Total Amount	432.48							
	For Shoulders								
	BB Road at Railway Underpass near Police Station								
		E/s	1	38.00		"/0.45	84.00		
		E/s	1	64.00		"/0.45	142.00		
		E/s	1	83.00		"/0.45	184.00		
		W/s	1	63.00		"/0.45	140.00		
		W/s	1	49.00		"/0.45	109.00		
		W/s	1	18.50		"/0.45	41.00		

Sl No	Description of work	Unit	Nos	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
						Total Quantity	700.00	432.48	302736.00
6	KSRB 4-1.2 : Providing and laying in position plain cement concrete of Mix 1:3:6 with OPC @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2								
		Cum							
	Rate Analysis								
	Basic Rate	5194.00							
	Area Weightage @6%	311.64							
	Total Amount	5505.64							
	For Footpath								
	BB Road at Railway Underpass near Police Station								
		E/s	1	38.00	0.75	0.15	4.28		
		E/s	1	83.00	0.75	0.15	9.34		
		W/s	1	63.00	0.75	0.15	7.09		
		W/s	1	18.50	0.75	0.15	2.08		
						Total Quantity	22.78	5505.64	125425.36
7	KSRB 14.6 : Providing and laying heavy duty cobble stones 60mm thick interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per sqm over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and HOM complete as per specifications. Specification No. KBS (KPWD SR 2018-19, Page No.103, Item No.14.6)								
		Sqm							
	Rate Analysis								
	Basic Rate	1053.00							
	Area Weightage @6%	63.18							
	Total Amount	1116.18							
	For Footpath								
	BB Road at Railway Underpass near Police Station								
		E/s	1	38.00	0.75		28.50		
		E/s	1	83.00	0.75		62.25		
		W/s	1	63.00	0.75		47.25		
		W/s	1	18.50	0.75		13.88		
						Total Quantity	151.88	1116.18	169519.84
8	Supply, Fabrication, Painting and Fixing of Pre-Cast Bollards for Footpath and Property edge/ Medians etc and any other items as specified in drawings or as approved by Engineer Incharge. (Data Rate)								
		Nos							
	Data Rate	1240.00							
	For Footpath								
	BB Road at Railway Underpass near Police Station								
		E/s	4				4.00		
		W/s	4				4.00		
						Total Quantity	8.00	1240.00	9920.00

Sl No	Description of work	Unit	Nos	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
9	KSRRB M300-18. Wrought iron and mild steel welded work (using angles, square bars, tees and channel grills, grating frames, gates and tree guards of any size and design etc. including cost of screens and welding rods or bolts and nuts complete fixed in position but without the cost of excavation and concrete for fixing which will be paid separately complete as per specifications. (P.No 150 of I.No.19.97 of PWD BCSR 2018-19)								
		Qtl							
	Rate Analysis								
	Basic Rate	7187.00							
	Area Weightage @6%	431.22							
	Total Amount	**7618.22**							
	Saucer drain								
	BB Road at Railway Underpass near Police Station								
		E/s							
		W/s					3.00		
							3.00		
						Total Quantity	6.00	7618.22	45709.32
								Total Construction Amount	4424515.89
								Add GST Charges 12%	530942.00
								PMC Charges 1%	44245.00
								Sub Total	4999702.89
								Miscellaneous and unforeseen charges etc.L.S	297.11
								Grand Total	5000000.00

Certificate:

1. The work spot has been inspected and found to be necessary
2. The work spot comes under BBMP Limits
3. The provisions made in the estimate are necessary and minimum
4. The estimate is based on CSR of 2018-19 and issuse rate on 03-01-2020

Assistant Engineer
Ward No.01
BBMP

Assistant Executive Engineer
Yelahanka Sub Division
BBMP

Executive Engineer
Yelahanka Division
BBMP

BRUHATH BANGALORE MAHANAGARA PALIKE
EXECUTIVE ENGINEER, YELAHANKA DIVISION

Name of Work: Improvements to Roads at Bharath Gowda Layout Main and Cross Roads and Surrounding Areas in Ward No.01 of Yelahanka Sub Division.

DETAILED ESTIMATE

S.No	Description of work	Unit	Nos	Dimenstions in m			Quantity	Estimated Cost= 7500000.00	
				L in m	B in m	D in m		Rate in Rs.	Amount in Rs.
1	KSRRB 300-1. Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (KPWD SR 2018-19, Page No.143, Item No.19.1)								
	Rate Analysis	**Cum**							
	Basic Rate	130.00							
	Lead for 5Km (1.28*2*5)+57	69.80							
	Area Weightage @6%	7.80							
	Total Amount	**207.60**							
	New RCC Drain								
	Bharth Gowda Layout Main Raod from Winmore Acadamy to 2nd Cross Road								
	0-58	Lhs	1	58.00	1.10	0.90	57.42		
	0-58	Rhs	1	58.00	1.10	0.90	57.42		
	1st Cross Road from Layout main Road to Dead end (SS Elite Appartment)								
	0-157	Lhs	1	157.00	1.10	0.90	155.43		
	0-157	Rhs	1	157.00	1.10	0.90	155.43		
	2nd Cross Road from Layout main Road to Dead end								
	0-157	Lhs	1	157.00	1.10	0.90	155.43		
	0-157	Rhs	1	157.00	1.10	0.90	155.43		
	Cross Road (Velpula Pride Appartment Road) from Winmore Acadamy Road to Dead								
	0-142	Rhs	1	142.00	1.10	0.90	140.58		
	For Culvert								
			1	8.00	1.26	1.05	10.58		
							Total Quantity	**887.72**	**207.60**	**184291.50**
2	KSRB 4-1.3 : Providing and laying in position plain cement concrete of Mix 1:4:8 with OPC @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2 (KPWD SR 2018-19, Page No.13, Item No.4.3)								
	Rate Analysis	**Cum**							
	Basic Rate	5102.00							
	Area Weightage @6%	306.12							
	Total Amount	**5408.12**							
	New RCC Drain								
	Bharth Gowda Layout Main Raod from Winmore Acadamy to 2nd Cross Road								
	0-58	Lhs	1	58.00	1.10	0.15	9.57		
	0-58	Rhs	1	58.00	1.10	0.15	9.57		
	1st Cross Road from Layout main Road to Dead end (SS Elite Appartment)								
	0-157	Lhs	1	157.00	1.10	0.15	25.91		
	0-157	Rhs	1	157.00	1.10	0.15	25.91		
	2nd Cross Road from Layout main Road to Dead end								
	0-157				1.10	0.15	25.91		

Sl No	Description of work	Unit	Nos	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
	Cross Road (Velpula Pride Appartment Road) from Winmore Acadamy Road to Dead								
	0-142								
	For Culvert	Rhs	1	142.00	1.10	0.15	23.43		
			1	8.00	1.26	0.15	1.51		
						Total Quantity	147.70	5408.12	798790.14
3	KSRB 4.2.2 : Providing and laying in position reinforced cement concrete of Design Mix M20 with OPC @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregtes @ 0.460 cum, with super plasticisers @ 3 liters confirming to IS 9103-1999 reafirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM curing, complete but excluding cost of reinforcement as per specifications.Specification No. KBS 4.1, 4.6(KPWD SR 2018-19, Page No.14, Item No.4.11)									
	Rate Analysis	Cum							
	Basic Rate	5659.00							
	Area Weightage @6%	339.54							
	Total Amount	5998.54							
	New RCC Drain								
	Raft								
	Bharth Gowda Layout Main Raod from Winmore Acadamy to 2nd Cross Road								
	0-58								
	0-58	Lhs	1	58.00	0.90	0.15	7.83		
		Rhs	1	58.00	0.90	0.15	7.83		
	1st Cross Road from Layout main Road to Dead end (SS Elite Appartment)								
	0-157								
	0-157	Lhs	1	157.00	0.90	0.15	21.20		
		Rhs	1	157.00	0.90	0.15	21.20		
	2nd Cross Road from Layout main Road to Dead end								
	0-157								
	0-157	Lhs	1	157.00	0.90	0.15	21.20		
		Rhs	1	157.00	0.90	0.15	21.20		
	Cross Road (Velpula Pride Appartment Road) from Winmore Acadamy Road to Dead								
	0-142								
	For Culvert	Rhs	1	142.00	0.90	0.15	19.17		
	Wall		1	8.00	1.06	0.20	1.70		
	Bharth Gowda Layout Main Raod from Winmore Acadamy to 2nd Cross Road								
	0-58								
	0-58	Lhs	2	58.00	0.15	0.60	10.44		
		Rhs	2	58.00	0.15	0.60	10.44		
	1st Cross Road from Layout main Road to Dead end (SS Elite Appartment)								
	0-157								
	0-157	Lhs	2	157.00	0.15	0.60	28.26		
		Rhs	2	157.00	0.15	0.60	28.26		
	2nd Cross Road from Layout main Road to Dead end								
	0-157								
	0-157	Lhs	2	157.00	0.15	0.60	28.26		
		Rhs	2	157.00	0.15	0.60	28.26		
	Cross Road (Velpula Pride Appartment Road) from Winmore Acadamy Road to Dead								
	0-142								
	For Culvert	Rhs	2	142.00	0.15	0.60	25.56		
			2	8.00	0.30	0.75	3.60		

Description of work	Unit	Nos	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
			L in m	B in m	D in m			
KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth cills and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 (KPWD SR 2018-19, Page No.16, Item No.4.31)								
Rate Analysis	Sqm							
Basic Rate	358.00							
Area Weightage @6%	21.48							
Total Amount	379.48							
Wall								
Bharth Gowda Layout Main Raod from Winmore Acadamy to 2nd Cross Road								
0-58	Lhs	4	58.00		0.60	139.20		
0-58	Rhs	4	58.00		0.60	139.20		
1st Cross Road from Layout main Road to Dead end (SS Elite Appartment)								
0-157	Lhs	4	157.00		0.60	376.80		
0-157	Rhs	4	157.00		0.60	376.80		
2nd Cross Road from Layout main Road to Dead end								
0-157	Lhs	4	157.00		0.60	376.80		
0-157	Rhs	4	157.00		0.60	376.80		
Cross Road (Velpula Pride Appartment Road) from Winmore Acadamy Road to Dead								
0-142	Rhs	4	142.00		0.60	340.80		
For Culvert								
		4	8.00		0.75	24.00		
					Total Quantity	2150.40	379.48	816033.79
KSRB 4.9.2 : Providing T.M.T steel reinforcement for R.C.C work TMT bars Fe500 including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specifications. Specification No. KBS 4.6.3 (KPWD SR 2018-19, Page No.18, Item No.4.46.2)								
Rate Analysis	Tonne							
Basic Rate	70966.00							
Area Weightage @6%	4257.96							
Total Amount	75223.96							
Considering 60Kgs for Drain per Cum	1	279.09		0.060	16.75			
Considering 75Kgs for Culvert per Cum	1	5.30		0.075	0.40			
					Total Quantity	17.14	75223.96	1289534.26
1 Providing **precast slab of 100 mm thick** including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge Data Rate								
Data Rate	Sqm							
For Covering Slab								
Bharth Gowda Layout Main Raod from Winmore Acadamy to 2nd Cross Road								
0-58	Lhs	1	58.00	0.75		43.50		
0-58			58.00	0.90		52.20		

Sl No	Description of work	Unit	Nos	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
	2nd Cross Road from Layout main Road to Dead end								
	0-157	Lhs	1	157.00	0.90		141.30		
	0-157		1	157.00	0.90		141.30		
	Cross Road (Velpula Pride Appartment Road) from Winmore Acadamy Road to Dead								
	0-142		1	142.00	0.90		127.80		
						Total Quantity	788.70	2337.00	1843191.90
7	Providing precast slab of 250 mm thick including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge Data Rate								
		Sqm							
	Data Rate								
	For Culvert								
			1	8.00	1.20		9.60		
						Total Quantity	9.60	5418.00	52012.80
						Total Construction Amount			6689755.00
						Add GST Charges 12%			802771.00
						Sub Total			7492526.00
						Miscellaneous and unforeseen charges etc.L.S			7474.00
						Grand Total			7500000.00

Certificate:

1. The work spot has been inspected and found to be necessary
2. The work spot comes under BBMP Limits
3. The provisions made in the estimate are necessary and minimum
4. The estimate is based on CSR of 2018-19 and issuse rate on 01-01-2019

For Qualiex Civil Design & Consultancy

Assistant Engineer
Ward No.01
BBMP

Assistant Executive Engineer
Yelahanka Sub Division
BBMP

Executive Engineer
Yelahanka Division
BBMP